



ROHS-Compliant Product

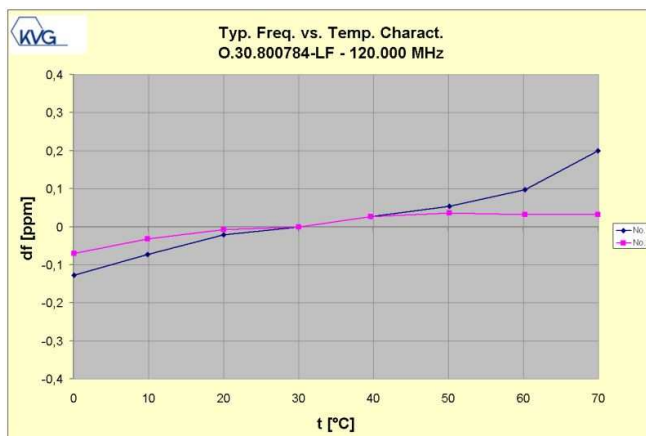
NWO.30.800784-LF



Description:

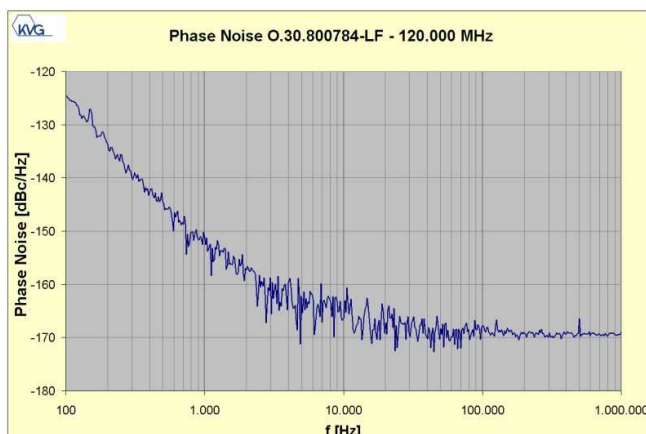
O.30.800784-LF is a 120.000 MHz high performance 'Oven Controlled Crystal Oscillator' (OCXO) offering exceptional low phase noise and tight frequency stability.

The part comes in a robust but still small hermetically sealed CO8 metal can package what makes it also suitable for humid environmental conditions.



FEATURES:

- Small CO-8 package
- Fast Warm-up Time
- Low Power Consumption
- Tight Frequency Stability
- Excellent Long-Term Stability
- Very Low Phase Noise
- El. Frequency Tuning Input
- Reference Voltage Output
- RoHS-Compliant (lead-free)



APPLICATIONS:

- Instrument Reference
- Microwave Communication Systems
- Clock Reference for MWave Signal Source
- Test & Measurement Systems
- Radar Systems



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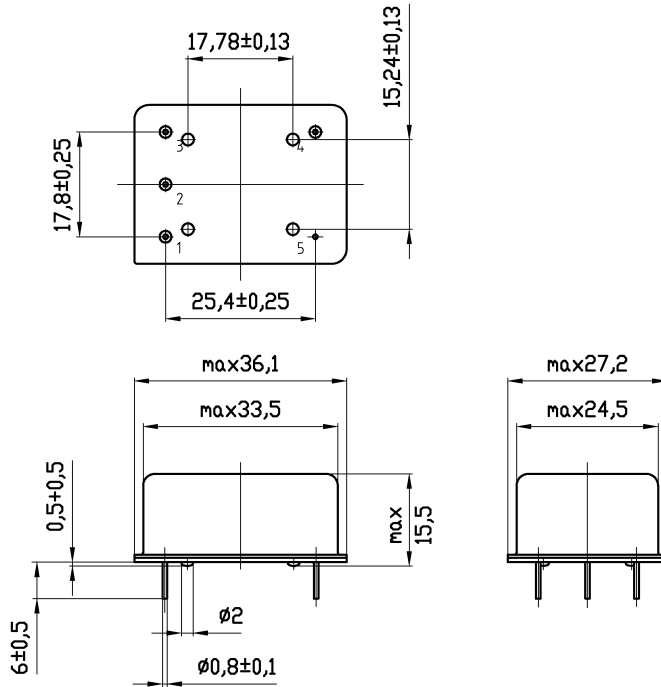
1. Specification	
Nominal Frequency F_N :	120.000 MHz
Initial frequency tolerance: ($T_A = +25\text{ }^\circ\text{C}$, after power on for 30 min):	$\leq \pm 2 \times 10^{-7}$
Frequency stability in the temperature range $-20\text{ }^\circ\text{C}$ to $+70\text{ }^\circ\text{C}$: vs. supply voltage changes $V_S \pm 5\%$: vs. load changes 50 Ohm $\pm 5\%$:	$\leq \pm 2 \times 10^{-7}$ $\leq \pm 1 \times 10^{-8}$ $\leq \pm 2 \times 10^{-9}$
Aging (after 30 days of continuous operation): per day: per year: 15 years:	$\leq \pm 3 \times 10^{-9}$ $\leq \pm 3 \times 10^{-7}$ $\leq \pm 1.5\text{ ppm}$
Frequency tuning range:	$\geq \pm 2\text{ ppm}$
Tuning voltage range V_C :	0 to 10 V
Reference voltage output V_{REF} :	$+10\text{ V} \pm 5\%$
Supply voltage V_S :	$+12.0\text{ V} \pm 5\%$
Supply current I_S steady state @ $+25\text{ }^\circ\text{C}$: during warm-up:	$\leq 150\text{ mA}$ $\leq 350\text{ mA}$
Warm up time: (to $dF/F_0 < \pm 1 \times 10^{-7}$ referred to F_0 after 1 hour)	$\leq 10\text{ min}$
Output signal type: Initial output level: Output load impedance:	Sine wave $\geq 7\text{ dBm}$ 50 Ohm $\pm 5\%$
Harmonics:	$\leq -25\text{ dBc}$
Phase noise: 100 Hz: 1 kHz: 10 kHz: 100 kHz: 1 MHz:	Typical values: $\leq -125\text{ dBc / Hz}$ $\leq -150\text{ dBc / Hz}$ $\leq -160\text{ dBc / Hz}$ $\leq -168\text{ dBc / Hz}$ $\leq -170\text{ dBc / Hz}$
Temperature ranges Operating: Storage:	$-20\text{ }^\circ\text{C} \dots +70\text{ }^\circ\text{C}$ $-40\text{ }^\circ\text{C} \dots +85\text{ }^\circ\text{C}$
2. Environmental conditions	
According to KVG Product Qualification Procedure AA-QM-200	
3. Marking	
Manufacturer's name, date code (week/year); Specification; Nominal frequency	

4. Case

Case style: BF9-IS-S-15.5

1.Pin configuration

1. Control voltage in V_C
2. Reference voltage V_{REF}
3. Supply voltage V_S
4. RF output
5. Ground, case



max. height incl. stand-offs: **15.5 mm**